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Civil Engineering

FIRE PREVENTION

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction establishes policies and procedures for fire prevention at Vandenberg Air Force Base (AFB). It describes reporting procedures for fire and emergency situations that require immediate response by the Fire Department. It further describes fire prevention procedures and prevention measures for facility managers, contractors, concessionaires, and military members residing in Vandenberg AFB housing and lodging facilities. This instruction implements AFI 32-2001, **Fire Protection Program**. It applies to all personnel, activities and organizations, including tenant units, contractors, concessionaires, family housing and mobile homes on Vandenberg AFB. Willful violators of this instruction will be subject to disciplinary action and pecuniary liability. **Attachment 1** is a Fire Prevention Checklist. The Paperwork Reduction Act of 1974 as amended in 1996 and AFI 37-160, Volume 8, **The Air Force Publications and Forms Management—Developing and Processing Forms**, affects this publication.

SUMMARY OF REVISIONS

The revision of this publication is to meet the format standards required by the Air Force. No content material has changed. Some required format changes have been made to allow for the conversion process.

1. Objective:

1.1. The fire prevention program ensures that the mission of Vandenberg AFB is not impaired by fire. The value of equipment and facilities is of personal concern to all people working and residing on Vandenberg AFB. In order for people to support an aggressive fire prevention program, they must be knowledgeable in the elimination of fire hazards and fire reporting procedures. This knowledge can minimize and reduce injury and monetary loss if a fire occurs.

1.2. Carelessness is the leading cause of fire. All personnel will observe preventive measures. Unit commanders and supervisors will enforce this instruction as it pertains to their units and will take

appropriate administrative or disciplinary action in cases of willful misconduct or negligence involving fire prevention policies and fire loss to government property.

1.3. Post a copy of this instruction conspicuously in occupied building.

2. Emergency and Fire Reporting Procedures:

2.1. In case of fire or emergency, notify the Fire Protection Flight, Fire Alarm Communications Center:

2.1.1. Dial 911.

2.2. Give the following information to the fire department communication operator:

2.2.1. Building number, type of facility and location (base exchange, dormitory, nursery, etc.).

2.2.2. Nature of emergency.

2.2.3. Hazards involved.

2.2.4. Name and grade of person reporting fire.

2.2.5. Telephone number from which you are calling.

2.3. Do not hang up until the fire communication operator tells you to do so.

2.4. REPORT ALL FIRES, REGARDLESS OF SIZE OR DAMAGE, TO THE FIRE DEPARTMENT.

3. Responsibilities :

3.1. Base Fire Marshal. The base fire marshal administers the base fire protection program per AFI 32-2001.

3.2. Fire Chief. The fire chief is directly responsible to 30 CES/CC for administration, management, and operation of the fire protection flight.

3.3. Unit Commanders and Supervisors: At all levels will establish the unit's fire prevention procedures outlined in AFOSH Standard (Std.) 127-56, *Fire Protection and Prevention*.

4. Fire Prevention Program:

4.1. Building managers and unit commanders will be responsible for the fire-safe condition of their assigned areas. They will follow the attached checklist to make fire prevention inspections in their respective areas.

4.2. All inspection reports will be kept on file for a minimum of one year. For those facilities inspected by base fire representatives, the facility manager or alternate will accompany the base fire prevention inspectors during fire prevention visits.

4.3. Facility managers will make sure places of work are secure and free of fire hazards before leaving for the day. Establish a checklist with the following as a minimum.

4.3.1. Empty trash containers as necessary.

4.3.2. Turn off heating appliances.

4.4. Contractors, concessionaires, managers, and supervisors are responsible for a sound fire prevention program in assigned facilities. They will comply with practices and procedures in this instruction. The Fire Chief or a designated representative will attend pre-construction conferences.

5. False Fire Alarms . These alarms create serious safety hazards to fire fighters and motorists using base roads. Any person damaging or tampering with fire alarm systems or reporting a false fire alarm, will be subject to punitive and disciplinary action.

6. Facility Managers: Monthly inspections of fire extinguishers are accomplished by the facility manager and recorded on the fire extinguisher record as outlined in AFOSH Std. 127-56.

7. Smoking and Disposal of Smoking Material:

7.1. Commanders and facility managers designating outside areas for smoking will ensure all smoking materials are disposed of in a proper manner. These areas require a metal can with a self-closing lid.

7.2. Smoking is not permitted in any Air Force installation.

7.3. Do not throw smoking materials or other burning objects from vehicles. Use ash-trays to extinguish smoking materials. It is against Air Force instructions to smoke cigarettes in **any** government facility.

7.4. Smoking is prohibited in all outside flightline areas and within fence perimeters of missile launch sites without approval of the fire chief.

8. Flammable Liquids and Gases:

8.1. Above ground flammable liquid storage tanks will be at least 50 feet from the nearest structure and either diked to contain its capacity plus 10 percent or positioned to drain to a safe area. Bottom discharge opening will have a valve that closes automatically through the operation of a heat-activated releasing device in event of fire. If this valve cannot be operated manually, there must be a second valve installed that can be. Equip tank with a vent at least one and one half inches in diameter. Fill tube in tanks will extend six inches from bottom to prevent static electricity buildup.

8.2. Mount liquefied petroleum storage tanks according to National Fire Code (NFC) 30, *Flammable and Combustible Liquid* and NFC 58, *Storage and Handling of Liquefied Petroleum Gases*.

8.3. Do not use any highly flammable liquid (flash point of less than 100 degrees) for cleaning purposes. Use only approved cleaning solvents. Deviations require approval by the fire chief.

8.4. Organizations and activities having a requirement to store flammable or combustible liquids will keep storage cabinet 40 feet from other structures. Lockers will be stenciled in black letters, "FLAMMABLE - KEEP FIRE AWAY."

8.5. Flammable liquids inside a building will be stored according to AFOSH STD. 127-43, *Flammable and Combustible Liquids*.

8.6. Cleaning solvent tanks will be an approved type, equipped with hinged cover and counter-balanced by a chain with a fusible link to ensure closing in event of fire.

- 8.7. Do not spray paint inside buildings unless in approved spray booth. Do not use gasoline to thin paints. Remove paint residue daily. Spot spray painting in hangars requires approval of the fire chief.
- 8.8. Operations requiring use of approved flammables will not interfere with the evacuation of personnel in the event of ignition.
- 8.9. Gasoline in cans, drums, or other metal containers will not be placed on any vehicle stored in garages or repair shops.
- 8.10. Vehicles and powered equipment will not be refueled with engines running. Trucks with plastic bed liners are required to have a ground wire from the truck body to the gas can being filled for grounding purposes (copper wire with alligator clips as a minimum).
- 8.11. Government vehicles being serviced at a service station dispensing island, will have their ignition off and radio on standby status. At no time will vehicles awaiting service be allowed to accumulate to the extent that evacuation of all vehicles is hindered in event of fire.
- 8.12. Operators of two-wheeled vehicles, motorcycles, minibikes, etc., will not be on the vehicles during servicing operations.
- 8.13. Use only non-ferrous tools or tools that will not produce sparks when used near flammable or explosive substances, vapors or dusts.
- 8.14. Use static grounds and bonds whenever flammable liquids are dispensed.
- 8.15. Warning signs on fuel storage areas will be posted according to AFOSH Std. 127-40, ***Fuel Storage Systems***.
- 8.16. Store large amounts of paints and solvents in separate noncombustible buildings 40 feet from other buildings or combustible structures marked "FLAMMABLE STORAGE." For quantities of less than 60 gallons comply with AFOSH Std. 127-43.
- 8.17. Dispose of animal or vegetable oil, grease, paint, lacquer, rags with linseed oil, cotton waste and combustible sweeping compounds daily. Good housekeeping practices are mandatory to eliminate common sources of spontaneous ignition.

9. Storage of Gas Cylinders and Chemicals:

- 9.1. Handle cylinders containing flammable or explosive gases with extreme care. Secure acetylene and oxygen cylinders on portable welding rigs. Pressurized cylinders transported by vehicle in a utilization configuration must have valve protection caps in place. Install hoses and regulators after arrival at job site.
- 9.2. Do not install temporary electrical wiring and equipment in spaces designated for storage of flammable or explosive gases.
- 9.3. Do not store combustible gases with oxidizing gases. A firewall must separate such storage compartments. You may store inert gases, such as helium, nitrogen, carbon dioxide, or argon with either flammable or oxidizing gases. Typical oxidizing gases are oxygen, chlorine, etc.
- 9.4. Pay particular attention to the location of cylinder storage. Prevent fumes from entering ventilation air intakes which lead to spaces where personnel may be affected or flammable gases could cause explosions. Store all chemicals in dry, well-ventilated areas and segregate from other types of materi-

als. Protect cylinders stored in open storage from direct sun and extreme heat or cold. Safeguard containers against mechanical injury.

9.5. Check acetylene bottle soft plugs, heads, valves, etc., periodically to make sure no leakage is occurring and they are in satisfactory condition. Hydrostatically test bottles at prescribed intervals per Department of Transportation regulations.

10. Packing Materials, Waste, and Warehouse Storage:

10.1. Storage bins for packing materials, such as excelsior, straw, upholstery materials, clean wiping rags, cotton waste and similar items, will be of substantial noncombustible materials, or of wood lined on the inside with single-lock-jointed sheet metal. Metal lining of a wooden bin will include all interior surfaces and edges. Arrange cover of bin to close automatically in case of fire. These bins will hold not more than three bales of material at any time.

10.2. Store packing materials in original bales until ready for use. Once bales are opened, place the contents in bins.

10.3. Deposit used waste, oil, paint, chemical-soaked rags, and other combustible materials, in plainly marked metal containers equipped with self-closing lids. Close covers and do not wedge or block open. Dispose according to the Base Hazardous Waste Management Plan.

10.4. Wastebaskets and trash containers will be of fire resistant material. Plastic bags as inserts are permitted.

10.5. Whenever possible, use trash receptacles (dumpsters) located throughout the base for disposal of ordinary waste materials. Keep doors closed at all times except when disposing of materials. Receptacles will be at least 50 feet from any building, if possible.

10.6. Store separately and adequately identify supply materials which may be hazardous in combination with each other.

10.7. Do not store supply materials within 24 inches of interior combustible walls. Do not store under or stack within 15 feet of buildings, ramps, doors, or exits.

10.8. Stack supply materials to minimize spread of fire and to permit easy access.

10.9. Height of materials should be as low as practical and volume limited so that any fire occurring can be contained and extinguished. Where automatic sprinkler protection is provided, keep a clearance of at least 18 inches under sprinkler heads when heights of stacks do not exceed 15 feet. When stacks are over 15 feet, maintain a clearance of 36 inches. Where sprinkler protection is not provided, keep a clearance of 36 inches or more between tops of stacks to the underside of the lowest beam, girders or other ceiling obstructions which might restrict the play of hose streams over the stacked materials. When storing hazardous materials, keep a minimum of 36 inches clearance between stacks and sprinkler heads.

10.10. Main aisles will not be less than eight feet wide. Cross aisles will not be less than four feet wide for stacks 10 feet high and five feet wide where stacks exceed 10 feet. When cross aisles are provided, locate them opposite window or door openings in exterior walls when practical.

10.11. Store materials a minimum of 24 inches from fire-walls.

10.12. Keep fire-walls, fire-doors, and floors in good repair at all times to restrict the spread of fire.

11. Electric Installation and Equipment:

- 11.1. All electrical installation and equipment will comply with the National Electric Code, as set forth in national fire codes.
- 11.2. All electronic computer systems will comply with national fire codes.
- 11.3. All essential hospital electric service will comply with national fire codes.
- 11.4. Electric standards for metal working machine tools will comply with national fire codes.
- 11.5. All electrical equipment used in area of flammable gases and vapors will be explosion-proof. Grounding of installed and portable electrical equipment will comply with national fire codes.
- 11.6. All electrical equipment installed in hazardous locations will be listed by Underwriter's Laboratories or Factory Mutual Laboratories for the particular location involved. The National Fire Code defines areas where explosion-proof equipment is required.
- 11.7. Do not use extension cords for permanent electrical wiring. Gang receptacle boxes and power strips are not permitted without a circuit breaker.
- 11.8. Extension cords will be equal to or larger than the cord of the appliance being serviced and equipped with only one male plug and not more than one female receptacle. Extension cords will not exceed length needed to perform required operations. Inspect frequently and keep in a safe condition. Keep free from oil and grease, and do not splice or extend in any manner. Do not tack tie, or twist around any fixture or portion of building.
- 11.9. Do not use portable drop-lights for temporary lighting unless equipped with suitable shatter-proof globes and guards, and approved for location in which they are used.
- 11.10. Do not overload electric circuits. Branch circuits servicing normal lighting and receptacles will not exceed 20 amps.
- 11.11. When a circuit has been interrupted by a tripped breaker, the appropriate Civil Engineer Zone will locate and eliminate the source of disturbance before restoring power to the circuit.
- 11.12. Cords will not extend under carpets or on the floor where they will be subject to mechanical damage.
- 11.13. Repair or remove defective electric cords, lighting fixtures, appliances, and switches. Report all defective electrical equipment for repair to the appropriate Civil Engineer Zone.
- 11.14. Only a competent electrician will install, alter or repair electrical wiring.
- 11.15. Disconnect all soldering irons, hot plates, and coffee makers when not in use and before securing the building at end of work day. All appliances will be Underwriter's Laboratories listed.
- 11.16. Clearance between electrical light fixtures and combustible materials will be at least 18 inches.
- 11.17. Aggregate light bulb wattage will not exceed rating of the light fixture.
- 11.18. Do not use combustible paper or cloth shades on or over electric bulbs.
- 11.19. Do not hang anything on electric wiring.
- 11.20. Keep electronic equipment clean and free from dust or lint.

12. Static Electricity: All persons entering an area where explosive vapors may exist will remove the accumulated static electricity present in their bodies and clothing (including gortex jackets) by touching a properly grounded post or connection. Work stands must be grounded when used in areas where flammable vapors, gases or combustible dusts are likely to be present.

13. Heating and Cooking Appliances:

13.1. Do not store materials of any type in boiler or mechanical rooms.

13.2. Clean kitchen ranges, hoods, grease extractors, heating equipment, and surrounding areas daily to prevent grease accumulation. Electrical fixtures and lights installed in hoods and ducts will be vapor-proof type.

13.3. Do not leave kitchen ranges and electric or open flame kitchen equipment unattended while in use.

13.4. Food preparation in dormitories and other base buildings will be limited to appliances such as two-slice toasters, electric crock pots, vegetable steamers, coffee pots, blenders, electric mixers, and rice cookers. Appliances must be placed on non-combustible surfaces and have the Underwriters Laboratory" seal of approval on each appliance.

13.4.1. Appliances that create large current draw such as electric fry pans, deep fat fryers, toaster ovens, electric broilers, tabletop electric grills, electric woks, or an open flame, cannot be used in individual rooms.

13.4.2. Unit First Sergeants are responsible for approving appliance use.

13.5. Electric heaters must be listed by the Underwriter's Laboratories. Appropriate Civil Engineer Squadron will install or supervise the installation of permanently installed electric heaters. All portable electric heaters will be equipped with a tilt switch and not be left unattended.

14. Arc Welding, Torch Welding, Cutting, Braking, Grinding, and Soldering:

14.1. Welding, cutting, brazing, grinding or soldering other than in an approved welding shop, requires permission from the fire department and the issuance of AF Form 592, **USAF Welding, Cutting and Brazing Permit**. Permits must be requested at least 24 hours in advance by calling the Fire Department Communications Center at 6-5380. Electrical soldering in all areas other than where flammable vapors may be present is exempt from the permit requirement. Compliance with requirements of AFOSH Std. 127-5, *Welding, Cutting and Brazing* is mandatory.

14.2. Personnel will make sure that all combustible material within a 35 foot radius has been removed prior to welding operations. Water extinguishers, shovels, etc., will be available to extinguish small fires.

14.3. Only authorized (certified) personnel will operate welding equipment.

14.4. Do not weld in the vicinity of flammable or explosive materials until all possibility of fire or explosion has been eliminated. Place a fire-resistant shield between flammable material and the welding operations where the removal of flammable material is impractical.

14.5. Follow requirements of AFOSH Std. 127-5 prior to work on containers which contained flammable liquids.

- 14.6. When a welding hose bursts or escaping gas is ignited, shut regulator valves off immediately.
- 14.7. Inspect all equipment before operation for damage, loose connections, and unsafe conditions. Repair or replace as required.
- 14.8. Keep oil and grease away from oxygen cylinders and fittings.
- 14.9. Remove and weld aircraft parts in a welding shop. Weld on aircraft only with approval of the aircraft maintenance officer and fire chief.
- 14.10. Station personnel as a fire guard with suitable fire extinguishing equipment near the welding location when required.
- 14.11. After welding or cutting operations have stopped, carefully inspect and patrol the area until no hazards exist.
- 14.12. Secure all gas cylinders used for welding to prevent falling or damage. All portable welding carts will have a 2A rated fire extinguisher in the immediate area where welding operations are performed.
- 14.13. Civil Engineer craftsmen trained by fire department technical services personnel may issue themselves welding permits in nonhazardous areas. They must receive recertification training annually.

15. Gasoline Powered Equipment:

- 15.1. Do not operate motor vehicles driven by internal combustion engines, continuously inside hangars unless specifically authorized by the fire chief. Do not store motor vehicles in hangars, or operate inside longer than necessary to transport material or equipment.
- 15.2. When electrical trouble, gasoline or oil leakage, or engine trouble arises, remove equipment from buildings immediately.
- 15.3. Do not refuel equipment indoors. Do not refuel any type of internal combustion engine, on which fuel tanks are located above or adjacent to the engine, until sufficient time has elapsed to permit the engine temperature to reach a point below the ignition point of gasoline (495 degrees F).
- 15.4. Powered lawn mowers may be stored inside buildings when approved by the fire inspector. Ventilate the room; place drip pans under the mower when positioned on combustible floors. Store gasoline for operating lawn mowers in an approved flammable locker.
- 15.5. All privately owned motor vehicles (i.e., motorcycles, dune buggies, etc.) will have a stock-type exhaust system for off-road use, and only be used in areas approved by the fire chief.

16. Places of Public Assembly and Recreational Facilities:

- 16.1. Managers and supervisors of public assembly and recreational facilities will constantly be alert for hazards to life that are involved in these facilities. They will take every precaution to prevent fires in places where large numbers of people assemble.
- 16.2. Managers and supervisors will ensure that each employee receives quarterly fire prevention training and keep accurate records. Training of newly hired employees will include, but not be limited to, use of fire extinguishers and other manual fire suppression equipment, fire reporting, and orderly exiting.

16.3. Managers and supervisors that have been designated in writing, will conduct a thorough inspection of their facility within one hour after closing to ensure that the building is fire-safe. Designated places of public assembly will report closing to the fire alarm communications center, 6-5380. Coordinate late closing due to special functions with the fire prevention office, 6-4680, 24 hours in advance, or on last duty day prior to the function, to avoid report of late closings. The inspection will include, but not be limited to:

16.3.1. Kitchen Area—heat producing appliances secured, grease filters cleaned.

16.3.2. Lounge Area—cushions removed from couches and chairs to make sure that smoking materials were not dropped behind them.

16.3.3. Remainder of Building—remove all trash from facility; make sure ashtrays are emptied in a noncombustible container with a self closing lid; turn heat thermostats off; disconnect nonessential electrical appliances, etc.

16.3.4. Follow a checklist for closing inspection. For assistance in preparing the checklist, contact the fire prevention office.

16.4. Facilities that have installed commercial cooking equipment will establish procedures to:

16.4.1. Clean grease filters as often as necessary to prevent accumulation of grease, but at least daily.

16.4.2. Clean kitchen range exhaust hoods, ducts, fans, roofs, louvers, exterior wall, and other areas where exhaust is extracted to the outside, at least quarterly. Facilities where the quantity of cooking is significant should be cleaned more often.

16.4.3. Maintain on file for each hood:

16.4.3.1. Date hood and filter were last cleaned.

16.4.3.2. Date duct system was last cleaned.

16.4.4. Make sure the following are complied with before starting cooking operations:

16.4.4.1. Clean grease filters and extractors are properly installed.

16.4.4.2. A metal cover is in the vicinity of deep fat fryers, to be used in the event of a grease fire.

16.4.4.3. Exhaust fan is operational. If the fan is not operational, cooking operations will stop until repairs have been made.

16.4.4.4. Deep fat fryers will have dual thermostats. The primary thermostat will limit the temperature to no more than 400 degrees F. The second will be non-adjustable and preset at no more than 475 degrees F. These thermostats will be tested annually. Documentation of the test will be affixed to the unit.

16.5. Textile wall coverings, curtains, drapes and movable scenery, including all types of decorations will be of fire retardant materials in places of public assembly. Send documentation of fire retardance to 30 CES/CEFS before installing curtains, drapes, etc. The document will specify date of fire retardant treatment, name of company performing work, and date next treatment is due.

16.6. Managers of places of public assembly will notify the technical services branch before any major social event when temporary decorations or unusual arrangements are involved.

- 16.7. The manager will maintain occupancy load data in his office. Posting of signs is not required.
- 16.8. Buildings or portions of buildings used for gathering of 50 or more persons without fixed seating, require seating diagrams to be submitted to 30 CES/CEFS for approval. All gatherings will adhere to approved seating arrangements only.
- 16.9. All stage curtains will be in a closed position except during performances, rehearsals, or similar activities.
- 16.10. Clothing and personal effects shall not be stored in corridors and lobbies.
- 16.11. No open flame devices nor pyrotechnic device will be used in any assembly occupancy unless specifically approved by 30 CES/CEFS.
- 16.12. Portable cooking equipment fueled by small heat sources that can be readily extinguished by water, such as candles or alcohol-burning equipment (including "solid alcohol") may be used provided adequate precautions are taken to prevent ignition of any combustible materials.
- 16.13. Candles may be used on tables used for food service if securely supported on substantial non-combustible bases so located as to avoid danger of ignition of combustible materials and only if approved by 30 CES/CEFS. Candle flames will be protected.

17. Aisles and Exits:

- 17.1. Under normal circumstances, do not block doors. Under no circumstances will a door be blocked that leads to an exit access corridor or an exit to the outside. In circumstances where a door needs to be blocked the using organization will make a written request to 30 CES/CEFS. A blocked door meeting the requirements of this section will clearly state on both sides of the door "THIS DOOR IS BLOCKED".
- 17.2. Keep adequate fire aisles in all facilities.
- 17.3. Equip all emergency exit doors in dining halls, theaters, chapels, schools, gymnasiums, and recreational buildings, having a capacity of 100 persons or more with panic hardware and self-closing devices. Keep building exits clear at all times and identify by signs or lights according to according to NFC 101.
- 17.4. Do not install pad locks, sliding bolts, chains, or any device that usurps panic hardware or fire rated doors.
- 17.5. When a building is modified, such as installation of additional walls, relocate the exit light so it is clearly visible to the occupants.
- 17.6. Doors to stair enclosures or horizontal exits will be self-closing and shall not at any time be secured in the open position.
- 17.7. All buildings constructed with attics will have at least one attic access point. Penetrations to fire rated walls or ceilings will have covers or doors with an equivalent fire rating. All attic access points will remain closed or covered to prevent the vertical spread of fire to the attic area.
- 17.8. Do not store combustibles beneath stairways.
- 17.9. Do not restrict the movement of doors in hallways and corridors by any means. Only those doors equipped with approved-type fusible links or automatic closing devices will remain open.

17.10. Exit doors in places of public assembly will have illuminated exit signs above doors. All exit doors will remain unlocked and in a free-swinging position during hours of operation or occupancy.

18. Vegetation Control:

18.1. Flammable native vegetation, including naturalized introduced species (e.g., eucalyptus) will be removed around all structures for a minimum of 30 feet. "Flammable" in this case means all dead vegetative matter and enough live crowns to avoid direct spread of fire from one tree or bush to another. Trees and bushes should be pruned enough to avoid their ignition by a ground fire.

18.1.1. Where slope and fire hazards warrant, the clearance and thinning will be increased to a minimum of 100 feet. Appropriate clearance will be determined by 30 CES/CEFS.

18.1.2. Where the surrounding vegetation is predominantly sparse grass, remove all flammable vegetation for at least 3 feet and keep a minimum of 30 feet well-trimmed around all structures.

18.2. Replace removed vegetation only with those plants that have proven fire protection qualities.

18.3. Open area under buildings, walkways, ramps etc., will be free of all vegetation.

18.4. Remove vegetation within the diked area around any flammable fuel tank.

18.5. Remove vegetation from within a 50 foot area around any stationary fuel dispensing unit.

18.6. Do not store grass cuttings in paper bags, cardboard boxes, or other combustible containers in or adjacent to any building or structure.

18.7. Remotely situated electrical emergency power generators will have a cleared, sealed surrounding area of 20 feet on all sides to prevent spark or fuel oil spillage ignition of vegetation.

19. Unpaved or Off Road Vehicle Travel:

19.1. No open fires will be allowed on Vandenberg from May through December.

19.2. In the spring of each year, personnel from the 30th Communication, Security Police, and Civil Engineer Squadrons, who are required to operate vehicles and equipment on unpaved or off road, will receive a fire prevention briefing. This briefing will be given by the Fire Prevention Section, telephone number 6-4680/6-8799.

19.3. Vehicles equipped with catalytic converters will not be operated on unpaved paths (excluding grass free dirt roads) or grass areas without a walking fire spotter trailing the vehicle.

19.4. Supervisors of persons who are authorized to travel off road during wildland fire season will be required to brief all vehicle operators and crews on the fire dangers associated with off road vehicle operation prior to being dispatched.

19.5. Whenever practical, leave the vehicle parked on the shoulder of the road and walk the last distance to the job site.

19.6. No vehicle will be allowed to operate off road (on any unpaved road, path, or grass area) unless it is equipped with a water type fire extinguisher and a shovel. Each using organization must purchase their own shovels and fire extinguishers.

20. Vehicle Parking:

20.1. Do not position vehicles or trailers in any manner that would block access of fire equipment to all sides of buildings, in fire lanes, within 15 feet of fire hydrants or fire department sprinkler and standpipe connections. Curbs and streets adjacent to fire department connections and hydrants will be considered a fire lane. All fire lanes will be 20 feet wide unless approved by the fire chief.

20.2. Vehicles will not be within 20 feet of a building except in an authorized parking area.

20.3. Gasoline or oil trucks (whether loaded or empty) will not enter hangars or other buildings unless the structure is designated for that purpose. Tank trucks may enter maintenance shops for repairs provided the tanks have been completely purged of flammable vapors. Park petroleum fuel trucks in single rows so they can be driven out of parking areas in a single turn. Do not park petroleum fuel trucks on the flightline in such a manner as to endanger aircraft, or within 100 feet of any building or structure.

21. Open Fire and Fireworks:

21.1. Open fires, camp fires, burning of rubbish, and similar material within the limits of Vandenberg AFB will not be permitted without the approval of the fire chief or designated representative. A written permit, 30 SW Form 605, **Open Fire Permit**, is required and can be obtained from fire department headquarters (Bldg. 10660). No open fires will be authorized on Vandenberg during fire season (May-Dec).

21.2. Do not use blowtorches or other flame units to remove paint from any surface or to burn wood for decorative purposes, unless authorized by the fire chief.

21.3. Fireworks of any type are not permitted on Vandenberg AFB unless approved in writing by the 30th Support Group Commander.

21.4. Do not use open-flame devices such as candles and oil lamps unless specifically authorized elsewhere in this instruction or by 30 CES/CEF.

21.5. Do not burn incense except in containers specifically designed for that purpose.

21.6. BBQ grills will be of the approved type and located at least 15 ft from any structure.

22. Use of Fire Extinguishers:

22.1. Facility Managers will notify 30 CES/CEFS, 6-4680, before relocating or removing portable fire extinguishers.

22.2. When a fire extinguisher has been used to control a fire, been accidentally discharged, has a broken seal, requires annual inspection, or becomes inoperative for any reason, the using organization must deliver it to the fire department extinguisher maintenance section, building 10660, for service. Date stickers on the extinguisher indicates the date annual inspection is due.

22.3. Return fire extinguishers to their original location after servicing. Do not use fire extinguishers for any purpose other than the control of fire.

22.4. The responsible supervisor will take appropriate disciplinary or administrative action for damage due to misuse of fire extinguishers.

23. Hazardous Conditions. The fire chief will personally observe any operation or condition considered to be a serious fire hazard. The final determination as to whether the operation or condition is stopped rests with the wing commander.

24. Traffic Across Fire Hose. Do not drive any vehicle over or across fire hoses used by the fire department unless specifically directed to do so by fire department personnel.

25. Traffic and Pedestrian Control at Fires:

25.1. The security police will respond to all fire calls to direct automotive traffic around the fire area.

25.2. Security police will control bystanders at a distance determined by the on-scene fire department representative.

25.3. No one will be allowed to enter a building involved in fire or structural collapse until the building is declared safe by fire department personnel.

25.4. Buildings where fire of unknown or suspicious origin has occurred will be secured until the fire investigation board members have completed their investigation.

25.5. Drivers of vehicles will, upon seeing or hearing emergency warning devices, immediately drive to the right side of the road, come to a stop, and remain there until all emergency equipment has passed. At no time will vehicles follow the emergency equipment closer than 300 feet, nor will they be parked within 25 feet of emergency equipment.

26. Fire Symbols:

26.1. Identify each building or area for storing explosives with the appropriate fire symbol. Symbols must be visible from all approaches to the building or area. Storage procedures, placement, and size of signs will be according to Explosive Safety Standards.

26.2. Each activity storing munitions will develop, distribute, and post a fire protection operating instruction. The fire chief or designated representative will approve these instructions. Forward one copy of each instruction to the base fire protection branch for incorporation into the base pre-fire plan.

26.3. Toxic chemicals other than explosives housed in any facility will be placarded with appropriate signs per Explosives Safety Standard, and as shown on AFVA 127-3, *USAF Explosive Fire and Chemical Hazard* symbols.

26.4. Notify the base fire department immediately of all new areas designated for munitions storage or changes in class of explosives stored. Using personnel will post appropriate fire symbols.

26.5. When transporting explosives (convoys) on base, notify the fire alarm communications center, 6-5380, giving route and time. Give termination of operation when complete.

26.6. Explosive transporting vehicles will have two 10-ABC extinguishers available.

27. Sanding and Floor Refinishing: Ensure gas pilots are in the off position and open flames are extinguished during floor sanding. Provide adequate ventilation, and if possible, put main electrical circuit breakers in the off position. Place all unnecessary electrical circuits in the off position.

28. Housekeeping Practices:

28.1. A high standard of cleanliness is a primary factor in fire prevention. Waste materials and rubbish saturated with various chemical and flammable products, will heat and ignite, especially when stored together. Remove rags containing various types of flammable liquids, etc., from the building or job site by the end of each work period. Mark containers "CLEAN RAGS" or "DIRTY RAGS" as appropriate.

28.2. Do not store sweeping compound in combustible containers. Use metal containers with lids. Remove trash (combustible paper, etc.) from the building at the end of each workday or upon completion of each cleanup period. Store steel wool in metal containers with lids when the roll has been opened. Do not store used steel wool in janitorial closets or lockers. Do not use steel wool for scrubbing floors with any type of flammable compound.

28.3. Do not store flammable liquids, such as paint thinner, alcohol, etc., in janitorial closets or lockers. Do not store combustible material on or near water heaters or other type of heat-producing devices.

28.4. The supervisor will brief contractor janitorial personnel on fire prevention procedures before assigning duties, and periodically thereafter.

28.5. Temporary or seasonal decorations will be of flame resistant or noncombustible material. Live Christmas trees are prohibited. Use of combustible decorations is prohibited unless approved by 30 CES/CEFS.

29. Fire Engineer - Building Alterations, Modifications, Self Help Projects and Repairs:

29.1. Carefully consider selection of material to construct partitions, cover walls, lower ceilings, etc. Do not use combustible materials, such as fiberboard and plywood for partitions, walls, and ceiling coverings. Do not install wall paneling without approval of the fire chief. Materials and alterations must not detract from original life safety design criteria and must comply with current codes and regulations governing the type of occupancy involved.

29.2. Any modification, alteration, or self help projects performed on any base building or structure requires prior approval on AF Form 332, **BCE Work Request**.

29.3. Extend fire alarm system detecting devices and sprinkler heads located on ceilings to cover existing area and below whenever false ceilings are installed. Install fire detection devices and sprinkler heads located on ceilings so as to be exposed to any fire that may occur within the protected area.

29.4. Do not paint fire alarm detection devices or sprinkler heads.

29.5. Submit fire protection deficiencies on AF Form 332. Coordinate forms involving fire protection deficiencies submitted by other organizations with 30 CES/CEFS, Building 10660.

30. Fire Prevention Visits:

30.1. Qualified fire prevention inspectors, accompanied by the facility manager or an alternate, will perform fire prevention inspections. Immediately correct fire hazards noted. Annotate the fire hazard report as to corrective action and forward to 30 CES/CEFS. Forward through channels when:

30.1.1. Correctable hazards are recurrent

30.1.2. An effective fire prevention program has not been established.

30.1.3. Facility managers have failed to enforce established fire prevention practices.

30.1.4. Unit commanders or facility managers have failed to establish and enforce fire prevention responsibilities.

30.1.5. Corrective action on a fire hazard is delayed for an unreasonable time.

30.1.6. Firm follow-up action is not established for the hazard abatement program.

30.2. Annotate AF Form 1487, **Fire Prevention Visit Report**, as to corrective action taken on fire hazards identified, and return it to 30 CES/CEFS by suspense date in item 4.

31. Fire Drills:

31.1. Facility managers will hold fire drills with the approval of unit commander. Fire protection flight will monitor all fire drills and activate fire alarm systems. Fire drills will be held as follows:

31.1.1. Child development centers and youth centers - monthly.

31.1.2. Places of public assemblies, i.e., clubs, dining facilities, base exchanges, stores, bowling alley, etc.—quarterly—employees only.

31.1.3. Industrial facilities—at the discretion of the commander.

31.1.4. Administrative facilities—two or more stories—at the discretion of commander.

31.1.5. Hospital—quarterly—employees only.

31.2. Fire drill exercises will include a designated assembly and accountability area. A senior representative will be assigned to meet and brief fire crews on essential information.

31.3. Contact 30 CES/CEFS, 6-4680, for scheduling of fire drills.

32. Training . Supervisors will administer fire prevention training to all newcomers on arrival. Personnel involved with fuels, munitions, and aircraft will receive training annually. Fire prevention lectures and demonstrations are always available for any social or functional group upon request from the fire prevention office at 6-4680.

33. Family Housing, Lodging, and Mobile Homes:

33.1. Sponsors are fully responsible for actions of family members in matters of fire prevention. Every occupant will practice good housekeeping in order to reduce the fire hazard potential and ensure safety.

33.2. When fire hazards are detected, take immediate action to eliminate them. Report those hazards beyond the occupant's control to the fire prevention office, 6-4680.

33.3. Occupants will comply with the following fire prevention policies:

33.3.1. Kitchen:

33.3.1.1. Do not leave cooking appliances unattended.

33.3.1.2. Arrange curtains so they will not blow over the stove.

33.3.1.3. Keep stove, including oven and broiler, clean and free of grease.

33.3.1.4. Keep exhaust fan and grease hood clean and free of grease. Remove filters at least once a month and wash in warm, soapy water.

33.3.1.5. Use only appliances listed by Underwriter's Laboratories.

33.3.1.6. Do not store combustible materials or flammable liquids in cabinets above stove.

33.3.2. Utility Room:

33.3.2.1. Do not store combustible materials at base of, or on top of hot water heater.

33.3.2.2. Clean lint trap in dryer after each use.

33.3.2.3. Make sure that washer and dryer are grounded.

33.3.2.4. Vent clothes dryer to the outside.

33.3.2.5. Do not block circuit breaker panel.

33.3.2.6. If a gas dryer is not used ensure the gas pipe is capped.

33.3.3. Living Room:

33.3.3.1. Do not splice electrical cords or place under carpets, or in the path of travel.

33.3.3.2. Inspect area before retiring or vacating to make sure cigarette butts are not burning under sofa cushions or on tables.

33.3.3.3. Check smoke detector for proper operation once a month.

33.3.3.4. Use only flame retardant decorations on Christmas tree.

33.3.3.5. Fireplaces will have built-in or fastened hearth screens

33.3.4. Furnace Area:

33.3.4.1. Do not use for storage.

33.3.4.2. Remove and inspect air filters every 90 days and replace if dirty, frayed or damaged.

33.3.4.3. Check blower motors periodically and clean by vacuuming when needed.

33.3.4.4. Check and vacuum compartment as needed.

33.3.4.5. Check and clean air intake area underneath by vacuuming periodically.

33.3.5. Bedrooms:

33.3.5.1. Do not smoke in bed.

33.3.5.2. Do not splice electric cords or place under rugs, or in the path of travel.

33.3.5.3. Keep closets clean and orderly

33.3.6. Garage:

33.3.6.1. Store flammable liquids, not exceeding five gallons, in approved containers equipped with a lid.

33.3.6.2. Do not allow rags to accumulate in the garage area. Dispose of rags in metal containers equipped with a lid.

33.3.6.3. Extension cords will comply with paragraphs 12.7. and paragraph 12.8. of this pub-

lication.

33.3.6.4. Do not alter wiring. Only qualified personnel will install, alter, or repair electrical wiring.

33.3.6.5. Spray painting vehicles, boats, etc. in garages is prohibited.

33.3.6.6. Do not store boxes or heavy objects on natural gas pipe.

33.3.6.7. Keep garage area clean and orderly, keep combustible materials to a minimum.

33.3.6.8. The use of ceramics kilns in family housing is prohibited.

33.3.7. General:

33.3.7.1. Use of multiple electrical plugs can overload circuits.

33.3.7.2. Do not tamper with electrical wiring.

33.3.7.3. Do not use any type of damaged appliance, plug, frayed or spliced cord.

33.3.7.4. Do not use extension cords as permanent electrical wiring, and do not permanently affix to the floor or walls.

33.3.7.5. Do not leave electrical appliances such as frying pans, coffee pots, toasters, irons, etc., plugged in and unattended.

33.3.7.6. Do not use gasoline, benzene, or any type of flammable liquids for cleaning purposes.

33.3.7.7. Soak smoking materials thoroughly with water before disposal.

33.3.7.8. Secure butane tanks to mobile homes by a chain or other means to prevent being accidentally knocked over.

33.3.7.9. Keep space under mobile homes free of accumulated materials, boxes, lumber, and combustible materials.

33.3.7.10. Report all fires extinguished by housing and mobile home occupants by dialing 911, regardless of nature or size, to the base fire department for investigation.

33.3.7.11. Keep matches and cigarette lighters well out of reach of children. Instruct children never to play with matches or cigarette lighters.

33.3.7.12. Parents will brief baby-sitters on fire reporting and evacuation procedures. Parents will always leave a telephone number with the baby-sitter where they can be reached in the event of an emergency.

33.3.7.13. Do not store ammunition or smokeless bulk powder in net explosive weight quantities of greater than 10 pounds, or five pounds black powder in military quarters. Store all powders in their original containers.

33.3.7.13.1. Do not smoke in the room or immediate area where explosives are stored. Maintain portable fire extinguisher in the immediate area where explosives are kept.

33.3.7.13.2. During hand loading operations, have available a portable fire extinguisher, and do not smoke.

33.3.7.13.3. Do not store or leave unattended hand loaders with explosive powder in

them.

33.3.7.14. Smoke detectors are mandatory in mobile homes and shall be so arranged that operation of the alarm will be clearly audible in all bedrooms over background noise levels with intervening doors closed. Responsibility for purchase rests with the occupant. An operational test will be accomplished by the housing representative upon occupancy.

33.3.7.15. Skirting installed around the bottom of mobile homes is mandatory and must be accomplished within 30 days after occupancy.

33.3.7.16. Fire symbols need not be used in family quarters; however, notify the fire communications center, 734-8232 ext. 6-5380, of specific locations where explosives are stored for pre-fire planning purposes.

33.3.7.17. Do not store explosive items of any type in lodging quarters.

33.3.7.18. Only 30 CES and housing contractor personnel will connect or disconnect gas-operated appliances.

33.3.7.19. Should the pilot light on a forced-air furnace go out, turn the wall thermostat to the off position and call the housing maintenance office.

34. Form Prescribed: 30 SW Form 605, Open Fire Permit.

THOMAS A. STEVENS, GS-13, DAF
Chief, Fire Protection Flight

Attachment 1

FIRE PREVENTION CHECKLIST

ALL PURPOSE CHECKLIST		PAGE 1 OF 1 PAGES		
TITLE/SUBJECT/ACTIVITY/FUNCTIONAL AREA Fire/Safety Checklist		OPR	DATE	
NO.	ITEM (Assign a paragraph number to each item. Draw a horizontal line between each major paragraph.)	Y	N	N/A
1	Are fire prevention directives posted and enforced?			
2	Are exits marked, unblocked, and unlocked when facility is occupied?			
3	Are fire extinguishers unobstructed, readily available, and current on annual inspections?			
4	Are personnel familiar with fire prevention, fire reporting, and use of extinguishers?			
5	Are sprinkler heads, smoke detectors, or heat detectors unobstructed and undamaged?			
6	Are all rooms, halls, storage areas, service areas, mechanical rooms, and boiler rooms clean and neatly arranged?			
7	Are flammables (gasoline, cleaning compounds, paints, thinners, oils) properly stored in authorized storage lockers?			
8	Are all electrical appliances in safe operating conditions?			
9	Have broken or defective electrical wall sockets, wall outlets, switches, and fixtures been reported to 3D CES for repair?			
10	Are portable electric heaters that are in use equipped with a tip over switch and in compliance with the appropriate listing agency?			
11	Are extension cords in use only as long as necessary and in safe operating conditions?			
12	Are exit lights in working order?			
13	In eating establishments, are hoods, ducts, and ranges kept clean?			
14	Are thermostats on deep fat fryers tested annually and after repair?			
15	Is documentation of testing affixed to the appliance?			
16	Is fire prevention training given quarterly and documented in employee records?			